

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1 and 5-10 are presently active in this case. Claims 11-28 were previously cancelled by a preliminary amendment. The present Amendment amends Claims 1 and 5 without introducing any new matter; and cancels Claims 2-4 without prejudice or disclaimer.

The outstanding Office Action rejected Claims 1-10 under 35 U.S.C. § 103(a) as unpatentable over Zhang (U.S. Patent No. 6,810,259) in view of Nakabayashi et al. (U.S. Patent Application Publication No. 2003/0112810, hereinafter "Nakabayashi").

In response, Applicants' independent Claim 1 is amended to recite features of Applicants' dependent Claims 2-4. These features also find non-limiting support in Applicants' disclosure as originally filed, for example in the specification from page 37, line 21, to page 38, line 24. No new matter has been added. Consequently, dependent Claims 2-4 are cancelled without prejudice or disclaimer, and dependent Claim 5 is amended to change the claim dependency, and to correspond to the changes of independent Claim 1, and to recite features related to the ID of a transmission tree. These features find non-limiting support in at least the specification starting at page 17, line 12. No new matter has been added.

In response to the rejection of Claims 1-10 under 35 U.S.C. § 103(a), in light of the amendments to independent Claim 1, Applicants respectfully request reconsideration of this rejection and traverse the rejection, as discussed next.

Briefly summarizing, Applicants' independent Claim 1 is directed to a packet transmission system, including a plurality of wireless base stations, and terminal devices belonging to one of the wireless base stations; wherein each of the wireless base stations has a location table describing each of the terminal devices associated with a corresponding wireless base station to which the terminal device currently belongs, a route control table

describing each of the other wireless base stations in the network in association with the next hop to which the received packet is to be forwarded if a source terminal device or a destination terminal device currently belongs to one of the wireless base stations, and each of the wireless base stations is configured to exchange the information in the location table with the other wireless base stations to update the location table; and each of the wireless base stations is configured to, upon receiving a packet, identify a wireless base station to which the source terminal device or the destination terminal device currently belongs based on a source address of the source terminal device or a destination address of the destination terminal device, respectively, included in the received packet and transmit the packet to the next hop to which the received packet is to be forwarded with reference to the route control table.

As explained in Applicants' specification in a non-limiting example, the "route control table" as recited in independent Claim 1 indicates the destination wireless base station under which the destination station is located, in association with the next hop. (See specification, p. 32, ll. 21-32, Fig. 14B.) Therefore, as shown in Applicants' Figure 14B, the route control table may specify the exact next hop, which has the advantage to avoid localized load concentration on a specific portion of a network. Please note that this description related to the route control table of Applicants' Claim 1 is provided for explanatory purposes only, and should not be used to limit the scope of Claim 1 in any fashion.

Turning now to the applied references, Nakabayashi is directed to a method of selecting wireless bridges from other wireless bridges, each of these bridges having a communication quality at a predetermined level or higher, which are located in a range where the wireless bridge can communicate, using a spanning tree protocol (STP). (Nakabayashi, Abstract.) The pending Office Action contends that Nakabayashi teaches a route control table, as recited in Applicants' original dependent Claim 3, and points out to Nakabayashi's

Figure 5, and paragraph [0050]. (Office Action, p. 5, ll. 10-13.) However, as explained in these passages of Nakabayashi, his routing table 20 contains the port number 21, the bridge ID 22, and the destination addresses 23. Further, as explained in the paragraph [0051] of Nakabayashi, the destination address field 23 contains broadcasting/multicasting addresses. Accordingly, Nakabayashi fails to teach all the features of Applicants' independent Claim 1. In particular, Nakabayashi fails to describe:

a route control table describing each of the other wireless base stations in the network in association *with the next hop to which the received packet is to be forwarded* if a source terminal device or a destination terminal device currently belongs to one of the wireless base stations.

(Claim 1, portions omitted, emphasis added.) Nakabayashi's routing table 20 merely indicates simple destination addresses, and is used to transmit broadcast packets by broadcasting/multicasting addresses, and no base stations are described that are associated with the next hop, as required by Applicants' independent Claim 1.

The reference Zhang, used by the pending Office Action to form the 35 U.S.C. § 103(a) rejection, fails to remedy the deficiencies of Nakabayashi, even if we assume that the combination is proper. This is also confirmed by the pending Office Action. (Office Action, p. 5, ll. 3-4.) Accordingly, Applicants respectfully traverse, and request reconsideration of this rejection based on these references.

Independent Claim 6 recites features that are analogous to the features recited in independent Claim 1 as argued above, albeit being different in scope. Accordingly, for the reasons stated above for the patentability of Claim 1, Applicants respectfully submit that the rejections of Claim 6, and the rejections of all associated dependent claims, are also believed to be overcome in view of the arguments regarding independent Claim 1.

Moreover, Applicants also respectfully traverse the rejection of the dependent claims under 35 U.S.C. § 103(a). For example, Applicants' dependent Claim 5 requires that the base

stations determine the next hop to which the received packet is to be forwarded from the route control table based on the ID of the transmission tree. As explained in Applicants' disclosure in Figure 4 showing the tree table of bridge "d" shown in Figure 3, and in the specification at page 17, lines 6-16, the ID of the transmission tree, indicated at "TREE ID" in Figure 4, is associated with the root bridge (root wireless base station) and adjacent bridges (nodes) including the previous and next node. As described in Applicants' specification at page 18, lines 5-11, the "ID of the transmission tree" may be transmitted in a packet. In this case, Applicants' bridge can autonomously determine the next node to which the received packet is to be transmitted by referring to the received "ID of the transmission tree" and the tree table of the bridge, as shown in Figure 4. Please note that this description related to the ID of the transmission tree of Applicants' Claim 5 is provided for explanatory purposes only, and should not be used to limit the scope of Claim 5 in any fashion.

The cited passages reference Zhang and/or Nakabayashi fail to teach such features related to a transmission of the ID of the transmission tree that is sent by a packet. Zhang's Figure 9G merely shows a block diagram illustrating the field structure of a cache entry copy message at 830 in accordance with the DCS protocol. (Zhang, Fig. 9G) Zhang's cache entry copy message 830 is used in supporting the location update protocol to transfer *copies of cache entries including subscriber profile data* from one node in the network to another, without any transfer of ownership of the cache entry. (Zhang, col. 26, ll. 14-25.) However, no ID of the transmission tree is sent by Zhang's cache entry copy message 830. In light of these comments, Applicants respectfully request reconsideration of the rejection of dependent Claim 5.

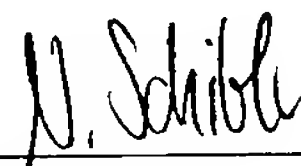
Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in

condition for formal Allowance. A Notice of Allowance for Claims 1 and 5-10 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

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